

**APPENDIX E**  
**EMISSION REDUCTION CREDIT (ERC)**  
**BANKING APPLICATION**

Department of Environmental Quality Office of  
Air Quality and  
Radiation Protection  
P.O. Box 82135  
Baton Rouge, LA 70884-2135  
(504) 765-0195

# LOUISIANA

## ERC BANK APPLICATION

### NITROUS OXIDES



**COMPANY:** Formosa Plastics Corporation - LA

**LOCATION:** Baton Rouge East Baton Rouge Parish  
(City) (Parish)

Gulf States Road, Baton Rouge, LA 70821  
(Physical Location)

**MAILING ADDRESS:** Post Office Box 271 Baton Rouge LA 70821  
(Street or P.O. Box) (City) (State) (Zip Code)

46.65

(ERCs deposited-TPY)

18.15

(ERCs relied upon for netting-TPY)

0.00

(ERCs relied upon for offsets-TPY)

September 2003

(Date of Emissions Increase/Decrease)

46.65

(ERCs available for netting-TPY)

28.50

(ERCs available for offsets-TPY)

#### COMMENTS

Formosa Plastics Corporation (FPC) is submitting this ERC bank application for the reduction in NO<sub>x</sub> emissions due to the shut down of the Vinyl Chloride Monomer 1 (VCM 1) Unit at the Baton Rouge Facility.

#### AFFECTED PERMIT

**Permit Number:** 0840-00002-10 **Facility:** FPC Baton Rouge Facility

**Affected EIQ Source ID No.(s):**

EIQ #145, 165, 169, 174, 176

I hereby certify that the information contained in this ERC Bank Application and calculations is true and accurate to the best of my knowledge.

Kelly B. Serio  
(Name)

Vice-President/Plant Manager  
(Title)

(225) 356-3341  
(Telephone Number)

Kelly Serio  
(Signature)

10/14/03  
(Date)

Department of Environmental Quality Office of  
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P.O. Box 82135  
Baton Rouge, LA 70884-2135  
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# LOUISIANA

## ERC BANK APPLICATION VOLATILE ORGANIC COMPOUNDS



**COMPANY:** Formosa Plastics Corporation - LA

**LOCATION:** Baton Rouge East Baton Rouge Parish  
(City) (Parish)

Gulf States Road, Baton Rouge, LA 70821  
(Physical Location)

**MAILING ADDRESS:** Post Office Box 271 Baton Rouge LA 70821  
(Street or P.O. Box) (City) (State) (zip Code)

<u>6.28</u> (ERCs deposited-TPY)	<u>0.00</u> (ERCs relied upon for netting-TPY)	<u>0.00</u> (ERCs relied upon for offsets-TPY)
<u>September 2003</u> (Date of Emissions Increase/Decrease)	<u>6.28</u> (ERCs available for netting-TPY)	<u>6.28</u> (ERCs available for offsets-TPY)

### COMMENTS

Formosa Plastics Corporation (FPC) is submitting this ERC bank application for the reduction in VOC emissions due to the shut down of the Vinyl Chloride Monomer 1 (VCM 1) Unit at the Baton Rouge Facility.

### AFFECTED PERMIT

**Permit Number:** 0840-00002-10 **Facility:** FPC Baton Rouge Facility

### Affected EIQ Source ID No.(s):

EIQ #115, 145, 165, 169, 174, 175, 176

I hereby certify that the information contained in this ERC Bank Application and calculations is true and accurate to the best of my knowledge.

Kelly B. Serio Vice-President/Plant Manager (225) 356-3341  
(Name) (Title) (Telephone Number)

Kelly Serio  
(Signature)

10/6/05  
(Date)

**Formosa Plastics Corporation, Louisiana**  
**Baton Rouge Plant**  
**Vinyl Chloride Monomer (VCM 1) Unit**

As included in this permit application, FPC is permanently shutting down the VCM 1 Unit. While most sources in the VCM 1 Unit ceased operation by December 2002, there were emissions from some VCM 1 Unit sources (such as the incinerators and fugitive emissions) during 2003. Emission reduction credits (ERCs) due to the shut down of the VCM 1 Unit were calculated using CY 2001 and 2002 as the baseline emissions period as provided below.

The emissions reductions were included in the NNSR NOx and VOC netting analyses of the VCM Unit modification project included in the August 2005 Title V permit application. FPC requests emissions banking for the emission reductions that were not relied upon in the NNSR netting analyses. The ERCs not relied upon for NNSR netting are provided below.

**2001 Actual Emissions by Source:**

EQ #	Description	NO <sub>x</sub> (tpy)	VOC (tpy)
<b>Vinyl Chloride Monomer 1 (VCM 1) Unit</b>			
115	Oxychlorination Vent	-	4.36
145	Flare Stack	0.01	0.01
165	Incinerator #1	17.27	0.08
169	South VCM Cracking Furnace	4.76	0.80
174	North VCM Cracking Furnace	6.30	0.72
175	VCM Plant #1 Fugitive Emissions	-	1.24
176	Incinerator #2	17.92	0.08
<b>Total</b>		<b>46.26</b>	<b>7.29</b>

**2002 Actual Emissions by Source:**

EQ #	Description	NO <sub>x</sub> (tpy)	VOC (tpy)
<b>Vinyl Chloride Monomer 1 (VCM 1) Unit</b>			
115	Oxychlorination Vent	-	2.36
145	Flare Stack	-	-
165	Incinerator #1	18.27	0.10
169	South VCM Cracking Furnace	5.36	0.91
174	North VCM Cracking Furnace	6.43	0.80
175	VCM Plant #1 Fugitive Emissions	-	0.96
176	Incinerator #2	16.98	0.14
<b>Total</b>		<b>47.04</b>	<b>5.27</b>

**Adjusted Allowable Emissions by Source<sup>1</sup>:**

EQ #	Description	NO <sub>x</sub> (tpy)	VOC (tpy)
<b>Vinyl Chloride Monomer 1 (VCM 1) Unit</b>			
115	Oxychlorination Vent	-	12.97
145	Flare Stack	1.00	1.00
165	Incinerator #1	35.90	1.20
169	South VCM Cracking Furnace	12.20	1.00
174	North VCM Cracking Furnace	12.20	1.00
175	VCM Plant #1 Fugitive Emissions	-	7.20
176	Incinerator #2	33.60	1.40
<b>Total</b>		<b>94.90</b>	<b>25.77</b>

**Calculate the Baseline Emissions Period for Emission Reduction Credits:**

Pollutant	2001/2002 Average Actual Emissions <sup>2</sup> (tpy)	Adjusted Allowable Emissions <sup>1</sup> (tpy)	Baseline Emissions for ERCs <sup>3</sup> (tpy)
NO <sub>x</sub>	46.65	94.90	46.65
VOC	6.28	25.77	6.28

**Calculate the Emission Reduction Credits:**

Pollutant	Baseline Emissions (tpy)	PTE Emissions <sup>4</sup> (tpy)	ERCs from Shutdown <sup>5</sup> (tpy)
NO <sub>x</sub>	46.65	0.00	46.65
VOC	6.28	0.00	6.28

**Calculate the Emission Reduction Credits Available for Banking:**

Pollutant	ERCs from Shutdown (tpy)	ERCs Relied Upon In NNSR Analysis (tpy)	Requested ERCs for Bank <sup>6</sup> (tpy)
NO <sub>x</sub>	46.65	18.15	28.50
VOC	6.28	0.00	6.28

**Footnotes:**

1. The Adjusted Allowable Emissions are the allowed potential to emit emissions for these sources prior to the shut down. In accordance with LAC 33:III.607.C.3, the allowable emissions should be calculated to account for any federal or state requirements to limit the emissions from these sources. These sources were voluntarily shut down by FPC and were not subject to any federal or state emission limitations; therefore, the Adjusted Allowable Emissions are equal to the permitted PTE Emissions in State Permit No. 0840-00002-10.
2. 2001/2002 Average Actual Emissions (tpy) = 2001 Average Actual Emissions (tpy) + 2002 Average Actual Emissions (tpy) / 2
3. Baseline Emissions for ERC (tpy) = Lower of 2001/2002 Average Actual Emissions (tpy) and Adjusted Allowable Emissions (tpy)
4. Since this equipment was permanently removed from service, the PTE emissions are zero.
5. ERCs from Shutdown (tpy) = Baseline Emissions (tpy) - PTE Emissions (tpy)
6. Requested ERCs for Bank (tpy) = ERCs from Shutdown (tpy) - ERCs Relied Upon in NNSR Analysis (tpy)